AMENDMENTS TO THE SPECIFICATION

In the Abstract:

Please replace the Abstract with the following Abstract:

A1 A method including searching for a pilot signal of a second communications system while ~~substantially simultaneously being in communication~~ retaining the connection with a first communications system.

In the Specification:

Replace the paragraph beginning on page 1, line 6, with the following rewritten paragraph:

A dual-mode transceiver, which may be a mobile station, may support and switch between two different types of wireless communications systems. When a mobile station travels outside the boundary of the communications system with which it is currently communicating, it may be desirable to maintain the communication link by transferring the call to a neighboring system, if one exists. The current and neighboring communications systems may use any wireless technology, for example, Code Division Multiple Access A2 (CDMA), which is a type of spread spectrum communications protocol, Advanced Mobile Phone Service (AMPS), Frequency Division Multiple Access (FDMA), Time Division Multiple Access (TDMA), or Global ~~Mobile Systems~~ System for Mobile communication (GSM). If the neighboring system uses CDMA on the same frequency band as the current system, a soft handoff may be performed, that is, the handoff is performed without first breaking the link with the first system.

Replace the paragraph beginning on page 2, line 13, with the following rewritten paragraph:

Figs. 5A and 5B are a flowchart illustration of a method for handing off from AMPS to wide-band CDMA ~~(WB-CDMA)~~ (W-CDMA) mode, according to an embodiment of the A3 present invention;

Replace the paragraph beginning on page 4, line 18, with the following rewritten paragraph:

Reference is now additionally made to Fig. 2, which illustrates a method for searching for a pilot signal of the second communications system 110 while ~~substantially simultaneously being in communication~~ retaining the connection with the first communications system 106, in accordance with an embodiment of the invention.

A4

Replace the paragraph beginning on page 5, line 17, with the following rewritten paragraph:

In general, for any kind of communications system, the processing may include identifying the pilot signals that are receivable and selecting the base station of the second communications system 110 that has the strongest pilot channel. Steps 126, 128 and 130 may be performed while ~~substantially simultaneously being in communication~~ retaining the connection with the first communications system 106 (step 132). If a CDMA pilot signal is found and acquired (step 134), then mobile station 102 may be switched to receiving signals from the second communications system 110 (step 136), meaning that communication is handed off from the first communications system 106 to the second communications system 110. It is noted that if the first communications system were to be communicating in CDMA, then the PN sequence may be shifted (step 137) in the event that the CDMA acquisition determines that the PN should be shifted. If no CDMA pilot signal is found (step 138), then mobile station 102 may remain in communication with the first communications system 106.

A5

Replace the paragraph beginning on page 5, line 32, with the following rewritten paragraph:

Reference is now made to Figs. 5A and 5B, which are a flowchart illustration of a method for handing off from an analog (such as AMPS) communications system to a CDMA communications system, according to one embodiment of the present invention. In an analog communication system such as AMPS, wide-band (WBD) analog communications may be ~~use to acquiring~~ used to acquire an analog communications channel. The WBD may comprise repetitions of sub-frames in a data frame, with which may be associated a WBD timing

A6

machine, and the method of the invention may make advantageous use of these repetitions, as described hereinbelow with reference to Fig. 6.

Replace the paragraph beginning on page 6, line 23, with the following rewritten paragraph:

If no CDMA pilot is found (step 166), the PN generator may be turned off (step 167), and after a predetermined period of time T (step 168) the process may return to step 151. If a CDMA pilot is found (step 169), then the WBD receipt may be permanently stopped (step 170), and the RF may be switched to the CDMA frequency (step 172). The PN generator may then be shifted by the amount calculated by the background processing, or alternatively, a real time acquisition may be performed (step 174). CDMA synchronization and paging may then be performed (step 176).

Replace the paragraph beginning on page 7, line 29, with the following rewritten paragraph:

According to another embodiment of the present invention, the portion of the signal may be recorded between the digital processing output and the rake receiver input, as shown in Fig. 4, to which reference is now made. The portion of the received signal may be recorded in a memory 65 such as, but not limited to, a read-access memory (RAM) or flash memory. In this embodiment, the power consumption may be improved by turning off rake receiver and acquisition engine 80 while recording the portion of the received signal. In one embodiment of the invention, analog processing unit 40 may comprise, without limitation, analog filtering, a direct-current (DC) [[DC]] remover, and automatic gain control (AGC), or any other suitable analog processing circuitry (all not shown). Digital processing unit 60 may comprise, without limitation, digital filtering, interpolating, or any other suitable digital processing circuitry (all not shown). Digital processing unit 60, for example, may be a digital signal processor.

Replace the paragraph beginning on page 8, line 7, with the following rewritten paragraph:

Q9

The invention may be used advantageously in handing off to or from a wide-band CDMA ~~(WB-CDMA)~~ (W-CDMA) communications system in a dual-mode communications system, as is now described with reference to Figs. 7 and 8.

Replace the paragraph beginning on page 8, line 10, with the following rewritten paragraph:

Q10

Reference is made to Fig. 7, which illustrates a compressed mode of operation for ~~WB-CDMA~~ W-CDMA. The compressed mode enables execution of communications systems measurements without affecting the current performance of data transfer in uplink and downlink.

Replace the paragraph beginning on page 8, line 24, with the following rewritten paragraph:

Q11

A dual mode transceiver, such as mobile station 102 of Fig. 1, may be in a ~~WB-CDMA~~ W-CDMA mode of operation (step 300). The transceiver may receive signals in a primary frequency (step 301) in the normal data frame 200 (step 302), and in the compressed data frame 202 (step 304). In the compressed data frame 202, the data transmission may be temporarily stopped in the gap 204 (step 306). The RF may then be switched to some secondary frequency (step 308), which may include changing the RF PLL to the secondary frequency and performing AGC. A portion of the secondary signal may be recorded during at least a portion of the gap period 204 (step 310), such as in memory 55 or 65, as described hereinabove with reference to Figs. 3 and 4, respectively.

Replace the paragraph beginning on page 9, line 7, with the following rewritten paragraph:

Q12

The background processing may be done faster than online processing used in ~~WB-CDMA~~ W-CDMA prior art. In addition, the processing may also be done during [[the]] out gap 206 in the background, along with other tasks of the mobile station. This may reduce the number of gaps 204 that the prior art uses for the same ~~amount~~ number of measurements.

A12

Additionally or alternatively, the background processing may reduce the ~~size~~ computing power or ~~amount~~ number of processors that the prior art uses for the same ~~amount~~ number of measurements.